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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,952	07/14/2003	Morgan D. Murphy	DP-309769	6410
22851	7590	06/20/2005	EXAMINER	
DELPHI TECHNOLOGIES, INC.			TO, TUAN C	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			3663	

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,952

Applicant(s)

MURPHY, MORGAN D.

Examiner

Tuan C. To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/24/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (US 20050011682A1) and in view of Aoki et al. (US 6774319B2).

With respect to claim 1, Murphy discloses an apparatus for estimating the weight of an occupant of a vehicle seat supported by a floor bracket as claimed. Murphy discloses a force sensor (38), and a force transfer mechanism interposed between floor bracket (16) and a mounting bracket (12) (Murphy, figure 6). The force transfer mechanism also includes first and second co-joined lever arms (70, 72) coupled to said floor bracket and said mounting bracket (Murphy, figure 6), where said lever arms terminate in first and second jaws that engage said force sensor (38).

Although Murphy does disclose that occupant weight applied to said seat produces movement of said lever arms that increases said engagement force to the

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force sensor (38) but Murphy is missing to disclose that said force sensor produces an output signal indicative of said occupant weight.

Aoki et al has been cited to overcome the missing features from Murphy. In Aoki et al, there is included a load sensor, and also included a teaching of force sensor produces an output signal indicative of the occupant weight (Aoki, abstract; figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Murphy to include the teachings of Aoki et al. so that the safety devices presented in the vehicle are properly activated whether the occupant on the seat is an adult or a child.

With regard to claim 2, Murphy discloses "first lever arm that is rotatably coupled to said mounting bracket and said second lever arm is rigidly secured to and floor bracket" (Murphy, figure 6).

With regard to claim 3, Murphy discloses that "overload means for limiting upward movement of said seat mounting bracket with respect to said floor bracket to prevent said seat from becoming detached from said floor bracket" (Murphy, figure 6; page 2, paragraph 0020).

With regard to claim 4, Murphy discloses that "seat includes a set of mounting brackets, and the apparatus includes a force sensor and compliant force transfer mechanism for each such seat mounting bracket, and the force sensors are co-located in pairs to facilitate electrical connections to the force sensor (Murphy, figure 2; figure 6, page 2, paragraph 0020).

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

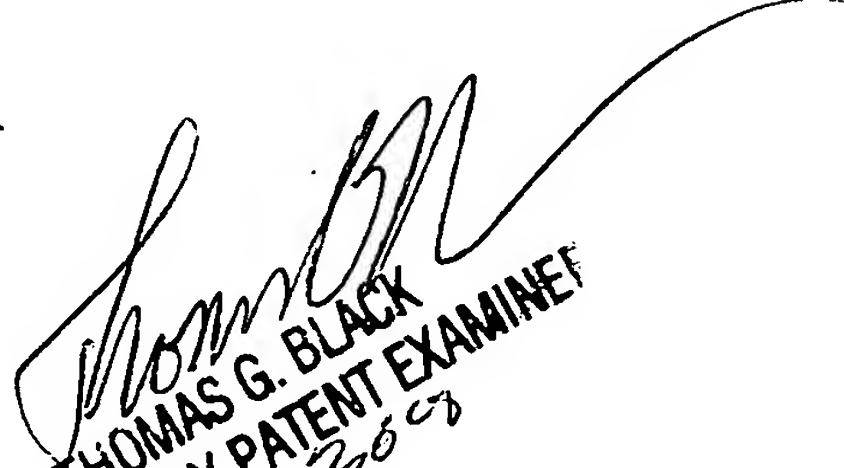
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/tc

June 8, 2005


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3663